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STATEMENT OF THE FEDERAL REPUBLIC OF GERMANY DELEGATION CONCERNING RESEARCH IN THE FIELD OF THE STRATOSPHERIC OZONE LAYER

Presented by

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Statement of the German Delegation
Concerning Research in the Field of
the Stratospheric Ozone Layer

Mr. Chairman,
distinguished delegates,

First of all, on behalf of the delegation of the Federal Republic of Germany, I would like to thank the United States Government for providing the opportunity of meeting here in Washington, D. C. to discuss scientific matters in the field of the stratospheric ozone layer. We also express our gratitude for the initiative taken by the UNEP and the support provided by it.

The Government of the Federal Republic of Germany takes a serious view of the danger of a modification of the ozone layer as a result of the effects of certain halocarbons and other air pollutants and is therefore envisaging intensified endeavours in order to be able to contribute towards finding solutions to the scientific issues which have emerged. At present we can but confirm the opinion of the United States National Academy of Science, insofar as a great deal of uncertainty still prevails in this field which therefore needs a great deal of additional research.

The bulk of research work in the Federal Republic of Germany is presently concerned with the investigation of the presence, behaviour and effects of halocarbons. On the government side, a research program

covering the years 1976 to 1979 is currently being executed with promotion funds amounting to DM 4.7 million. Research projects requiring a further DM 2 million are in preparation. Other research activities are being carried out by industry to the order of approximately DM 1 million annually. The projects concern the improvement of analytical measuring methods, the measuring of vertical and horizontal profiles, as well as the North-South distribution of halocarbons with the aid of aircraft probes or registering balloons, and also laboratory tests of the photochemical reactions taking place in the atmosphere. Although priority is given to halocarbons, nitric oxides and other trace gases in the atmosphere are also detected at the same time in order to be able to base scientific conclusions on the evaluation of as comprehensive a range of data as possible.

Participants in the program are the universities of Freiburg, Wuppertal, Bonn, Kiel, Bochum, the Max-Planck-Institutes in Lindau and Mainz, the Nuclear Research Establishment Jülich, the Battelle Institute and the German Weather and Meteorological Service.

At Bonn University a project is also being carried out concerning the measuring of short-wave solar radiation, which is greatly influenced by variations in the ozone layer. This technique, which uses actinometric photometry, is to be carried out close to the earth in order to be able to correlate in the course of longtime experiments a possible biological effect with fluctuations in ultra-violet radiation. Another project

being carried out at Heidelberg University aims to detect natural sources of halocarbons by examining datable samples of ground water. The findings are to be combined to provide a trend analysis. The Max-Planck-Institute in Mainz is preparing a study on the metabolization of halocarbons in the biosphere.

The halocarbons program was launched in the Federal Republic of Germany in 1976. A symposium is planned to be held in Mainz in mid-1977, during the course of which the program will be presented and first results will be put up for discussion.

For the time being we have attached the greatest importance to the elaboration of the necessary basis of measuring data concerning the actual presence and behaviour of halocarbons. In the later phase of the program, which is to commence in autumn this year, we plan to include studies of the possible effects on the climate caused by halocarbons and other air pollutants. In particular, climate models are to be developed in order to provide some clues to the effects of emissions.

Moreover, studies are envisaged of the biological consequences, which after all are wh interest us. We consider that it is all the more necessary to clear up the scientific uncertainty in this field because there is still a great deal of speculation on this very subject.

It will only be possible to investigate these issues at considerable cost and with some effort within a reasonable period. We are interested

in an efficient international division of efforts. We are prepared to make available the results of our work and to use our best efforts within this international framework in order to close gaps in knowledge.

In our view, the United Nations Environmental Programme is the appropriate forum for coordinating the handling of these global environmental problems in international cooperation. The Federal Republic of Germany is prepared to cooperate in the coordination of the scientific endeavours undertaken by the various governments and non-governmental organizations.